

Groundwater Data Logging Made Affordable

Heron Instruments' dipperLogs are a durable, versatile and cost effective tool which will deliver accurate water level and temperature readings for many years. Groundwater professionals have been successfully employing the **Heron** family of instrumentation to monitor both open waters and wells, to perform pump and slug tests, and to complete wetland and tidal studies with excellent results for over 20 years.

With the dedicated, intuitive software, the dipperLog is quick and easy to program and launch and allows for simple data recovery. Easily save your data in a tabular display and graph and view both parameters side by side in a split screen.

Heron also offers various accessories to further enhance your logging experience. The wide range of transducer values (available in both absolute and vented models) will ensure the collection of the most accurate of levels.



dipperLog^{TOUGH}

dipperLog TOUGH is a premium logger, with titanium body and transducer coupled with Teflon O-rings, is suitable for use in the most caustic and hazardous of environments. The dipperLog TOUGH offers a memory capacity of 64,000 data points and a choice of pressure ranges.



dipperLog^{VENTED}

The dipperLog VENTED, incorporates a gauged transducer that measures pressure exempt from barometric influences. The dipperLog VENTED is removable from the vent cable allowing for easy field replacement. Attach the NEW Vent Cap Adapter for deployments (without vented cable) used in shallow wetland studies.



dipperLoq³²

dipperLog 32, the most economical data logger in our lineup, has a maximum storage capacity of 32,000 data points and an expected battery life up to 5 years◊.

The dipperLog 32 is only available in a 30m/100′ pressure range.



dipperLog⁶⁴

The dipperLog 64, our flagship logger, offers a maximum storage capacity of 64,000 data points and an extended battery life up to 10 years. The dipperLog 64 comes in a wide variety of pressure ranges and deployment options.



4-20mAPressure Transmitter

The 4-20 mA Pressure Transmitter is easily integrated into an existing SCADA system or with a third party data logger. It will provide a continuous water level reading for your application. It can also be equipped with a digital display.



barLog

The barLog is configured to measure barometric pressure fluctuations necessary to compensate your absolute dipperLog data files. The barLog takes readings every 1 hour and has a capacity for 32,000 data points.

♦ Dependent upon use

Specifications

| | dipperLog ^{tough} | dipperLog ⁶⁴ | dipperLog ^{VENTED} |
|---------------------------------|--|--|--|
| Performance | | | |
| # of Data Points | 64,000 | 64,000 | 64,000 |
| Download Speed | 21,333.33/min | 21,333.33/min | 21,333.33/min |
| Accuracy %FS | 0.05 | 0.05 | 0.05 |
| Stability %FS/Year | 0.20 | 0.20 | 0.20 |
| Operating Features | | | |
| Pressure Ranges | 10m/30ft, 30m/100ft, 60m/200ft, 120m/400ft | 10m/30ft, 30m/100ft, 60m/200ft, 120m/400ft | 10m/30ft, 30m/100ft, 60m/200ft, 120m/400ft |
| Overpressure Rating | 2X | 2X | 2X |
| Operating Temperature | -20°C to 80°C | -20°C to 80°C | -20°C to 80°C |
| Pressure Resolution | 0.001 | 0.001 | 0.001 |
| Expected Battery Life◊ | Up to 10 Years | Up to 10 Years | Up to 10 Years |
| Warranty | 3 Years | 3 Years | 3 Years |
| Physical Characteristics | | | |
| Wetted Material | Titanium & Delrin® | 316 SS & Delrin® | 316 SS & Delrin® |
| O-Rings | Teflon™ | Viton™ | Viton™ |
| Transducer | Titanium Piezoresistive Silicon | 316 SS Piezoresistive Silicon | 316 SS Piezoresistive Silicon |
| Length | 130mm | 130mm | 130mm |
| Diameter | 22mm | 22mm | 22mm |
| Weight | 105g | 160g | 160g |
| | Suspended*, Direct Read*, Reel*, Wireless Communication* [△] | Suspended*, Direct Read*, Reel*, Wireless Communication* [△] | Suspended*, Direct Read*, Reel* |





This is the simplest and most inexpensive method of deploying a dipperLog. Suspend the dipperLog in the well using a non-corrosive, nostretch wire or cord. No communication is possible with the dipperLog in-situ, the dipperLog must be programmed and started before deployment then recovered for data retrieval and reprogramming.

Add the Vent Cap Adapter to the dipperLog

Add the Vent Cap Adapter to the dipperLog VENTED for deployments in shallow wetland studies.



Direct Read Well Head Version

This is the least labour intensive option. The dipperLog is suspended on a direct read cable, which establishes a connection to the dipperLog at the wellhead. Programming of the dipperLog, downloading of data and stopping and starting data collection can be done while the logger is deployed.

Available in both absolute and vented models. Real time display is available with this configuration.

Accessories:

Software & PC Communication Cable



PN# 5008 PN# 5009

barLog for Barometric Compensation



PN# 5116

tapNtell Surface Mount Display



PN# 5020

Held Display

showNtell Hand

PN# 5018

Digital Display 4-20mA



PN# 5031

Specifications

| dipperLog ³² | 4-20mA ^{Pressure Transmitter} | barLog | |
|------------------------------------|---|-------------------------------|---|
| | | | Performance |
| 32,000 | N/A | 32,000 | # of Data Points |
| 21,333.33/min | N/A | 21,333.33/min | Download Speed |
| 0.10 | 0.05 | 0.05 | Accuracy %FS |
| 0.40 | 0.20 | 0.20 | Stability %FS/Year |
| | | | Operating Features |
| 30m/100ft | 10m/30ft, 30m/100ft, 60m/200ft, 120m/400f | ⁺ N/A | Pressure Ranges |
| 2X | 2X | 2X | Overpressure Rating |
| -10°C to 50°C | -20°C to 80°C | -20°C to 80°C | Operating Temperature |
| 0.01 | 0.001 | 0.001 | Pressure Resolution |
| Up to 5 Years | N/A | Up to 10 Years | Expected Battery Life◊ |
| 1 Year | 3 Years | 3 Years | Warranty |
| | | | Physical Characteristics |
| 316 SS & Delrin® | 316 SS & Delrin® | 316 SS & Delrin® | Wetted Material |
| Viton™ | Viton™ | Viton™ | O-Rings |
| 316 SS Piezoresistive Silicon | 316 SS Piezoresistive Silicon | 316 SS Piezoresistive Silicon | Transducer |
| 105mm | 130mm | 105mm | Length |
| 22mm | 22mm | 22mm | Diameter |
| 130g | 160g | 130g | Weight |
| Suspended*, Direct Read*, Reel* | N/A | N/A | Deployment Options All Absolute Deployments Require Compensation *Features Available for Additional Costs *∆dipperLog-SMART Wireless Monitoring System Compatible |
| 4 | | | A = 1 |



Reel Version

The reel version is an ideal option when transporting your dipperLog from site to site for pump and slug tests or any other short term deployment. Programming and downloading of the data is capable via the connection on the face plate on the reel. Available in both absolute and vented models. Real time display is available with this configuration.



4-20mA

♦ Dependent upon use

The 4-20mA Pressure Transmitter is easy to install by simply attaching the vented cable to an existing SCADA system. A two wire 4-20mA current loop is used for signal transmission. This is a pressure sensor only and has no data logging capability.

SCADA systems are not available through Heron



Vent Cap Adapter for dipperLog^{VENTED}



PN# 5035

Well Mounting Kit



PN# 5023



PN# 5006





dipperLog Software

Selection Guide

| Pressure Range | dipperLog ^{TOUGH} | dipperLog ⁶⁴ | dipperLog ^{VENTED} | dipperLog ³² |
|----------------|----------------------------|-------------------------|-----------------------------|-------------------------|
| B (10m/30ft) | 5401-Ti | 5401-64 | 5401-V | N/A |
| C (30m/100ft) | 5402-Ti | 5402-64 | 5402-V | 5402-32 |
| D (60m/200ft) | 5403-Ti | 5403-64 | 5403-V | N/A |
| E (120m/400ft) | 5404-Ti | 5404-64 | 5404-V | N/A |

Absolute Logger dipperLog (64, TOUGH, 32) barLog for Barometric Compensation Vent Cap Adapter Stainless Steel Suspension Wire Kevlar Suspension Cord Suspension Crimps PC Communication Cable Vented Logger dipperLog Vented Vent Cap Adapter Stainless Steel Suspension Wire Kevlar Suspension Cord Suspension Crimps PC Communication Cable

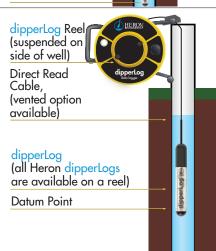
dipperLog Software

| Locking Well Plug | | | l |
|----------------------|--|---------|---|
| Stainless 316 Crimps | | | |
| Wire/Cord | | | |
| | | | |
| Standard Cap | | | |
| dipperLog | | 916 | |
| Datum Point | | dippert | |
| | | • | |

| Direct Read Version (Communicate While in Well) | | |
|---|------------------------------|--|
| Absolute Logger | Vented Logger | |
| dipperLog (64, TOUGH, 32) | dipperLog Vented | |
| Direct Read Cable | Vented Direct Read Cable | |
| Direct Read Well Head | Vented Direct Read Well Head | |
| Mounting Bracket | Mounting Bracket | |
| PC Communication Cable | PC Communication Cable | |
| barLog for Barometric Compensation | N/A | |
| dipperLog Software | dipperLog Software | |

| Standard Cap & Direct Read Well Head Lockable Well Cap | | |
|--|------|--|
| barLog (suspended above water in well, or near site) | -der | |
| Direct Read Cable (vented option available to eliminate barLog) | nie) | |
| dipperLog Datum Point | | |

| Reel Version (Portable, Communicate While in Well) | | |
|--|--------------------------|--|
| Absolute Logger | Vented Logger | |
| dipperLog (64, TOUGH, 32) | dipperLog Vented | |
| Reel | Vented Reel | |
| Direct Read Cable | Vented Direct Read Cable | |
| PC Communication Cable | PC Communication Cable | |
| barLog for Barometric Compensation | N/A | |
| dipperLog Software | dipperLog Software | |



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